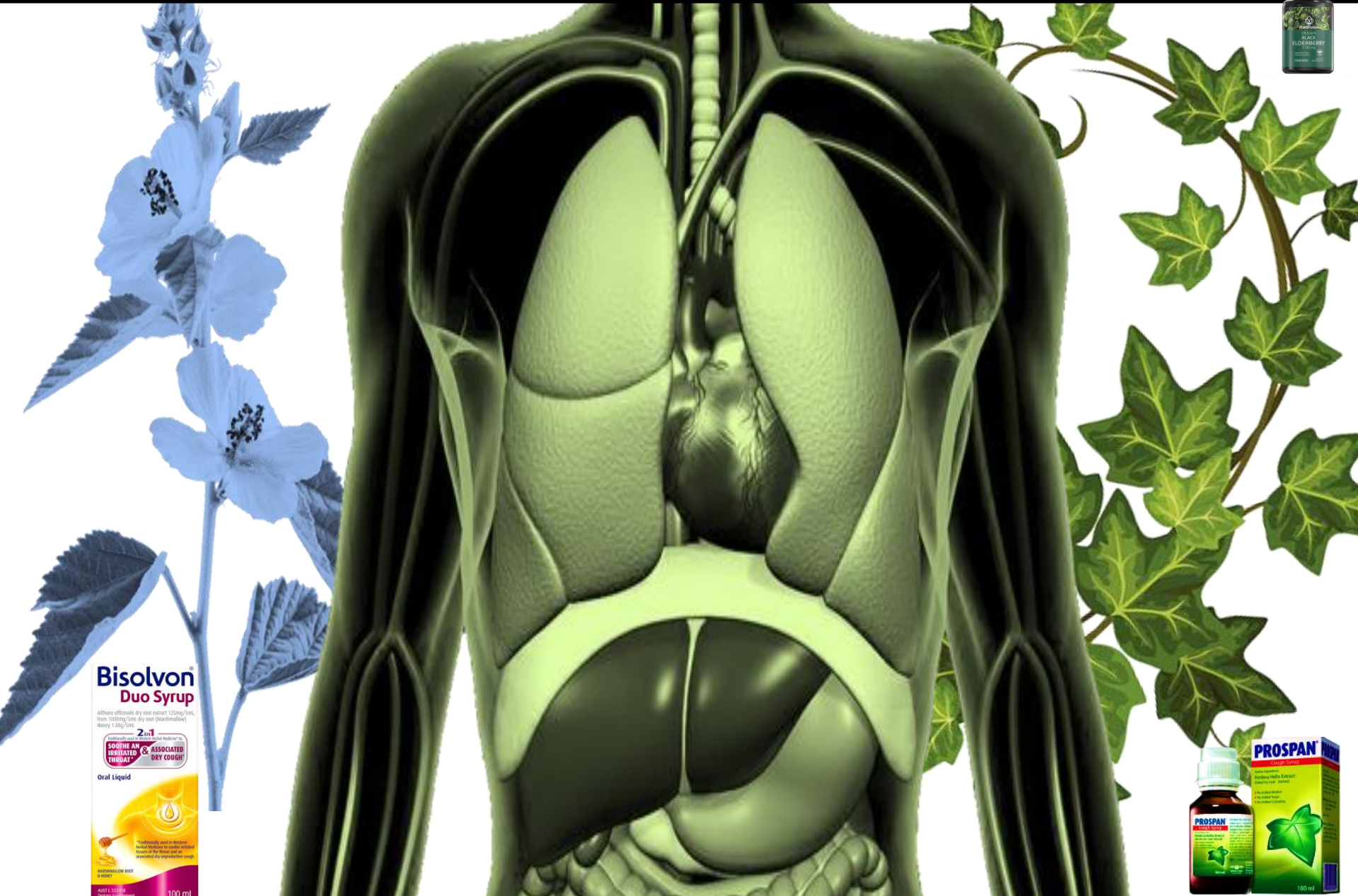


Respiratory Tract Disorders

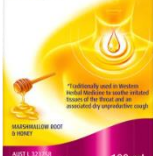


Bisolvon[®]
Duo Syrup

Althoea officinalis dry root extract 120mg/5ml,
from 1000mg/5ml dry root (Marshmallow)
Heavy's 5.6g/5ml

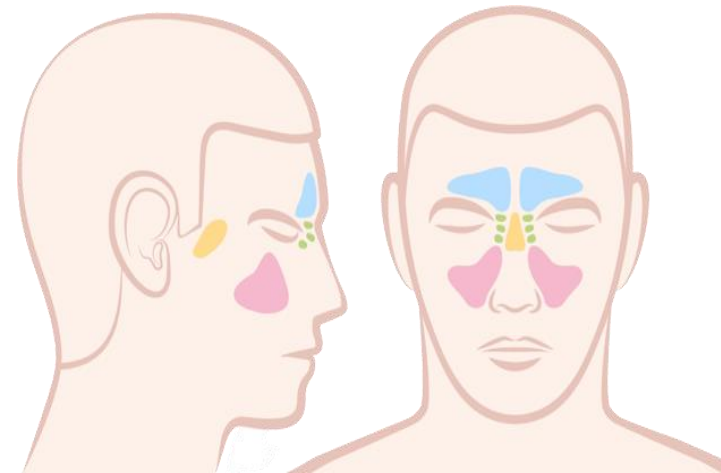
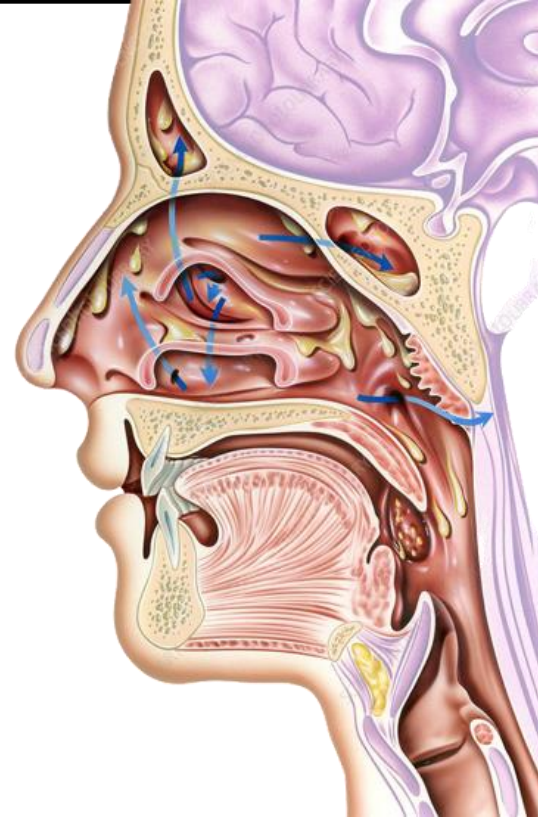
2 in 1
**SOOTHING AND
IRRITATED
THROAT** & **ASSOCIATED
DRY COUGH**

Oral Liquid



Upper Respiratory Tract Disorders

- ☐ **Rhinitis** حساسية التهاب الانف
- ☐ **Common cold** البرد
- ☐ **Influenza** الانفلونزا
- ☐ **Tonsillitis** التهاب اللوز
- ☐ **Pharyngitis** التهاب الحلق
- ☐ **Sinusitis** التهاب الجيوب الانفية

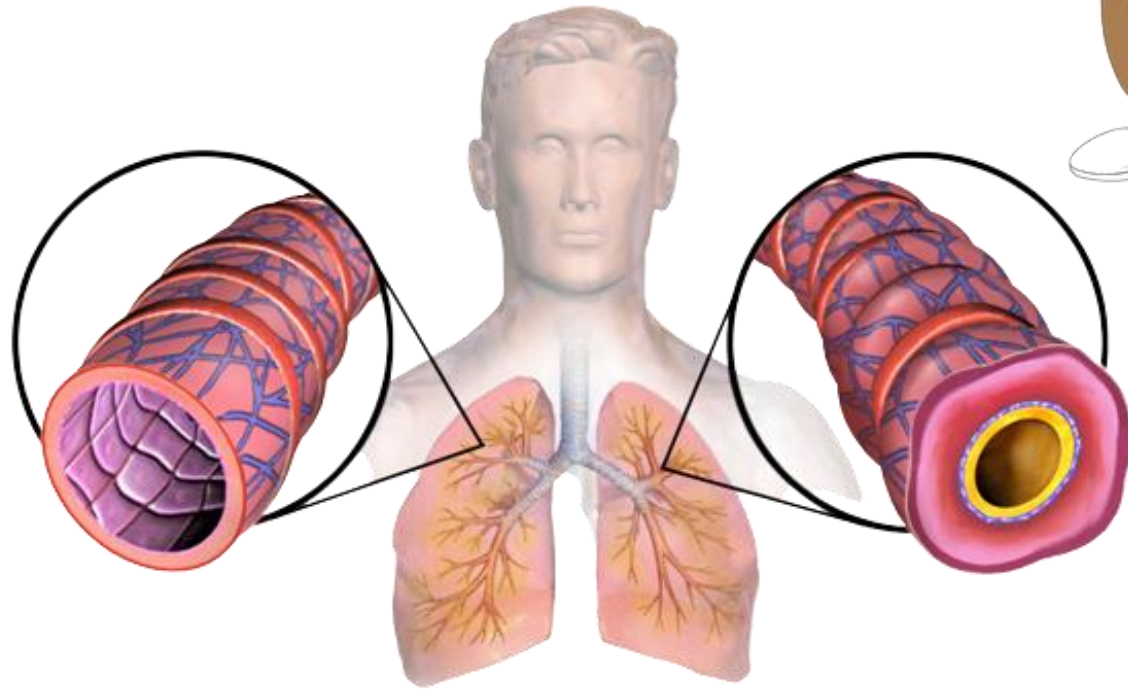


Lower Respiratory Tract Disorders

❑ Cough الكحة

❑ Asthma الربو الشعبي - الازمة الصدرية

❑ Bronchitis التهاب شعبي



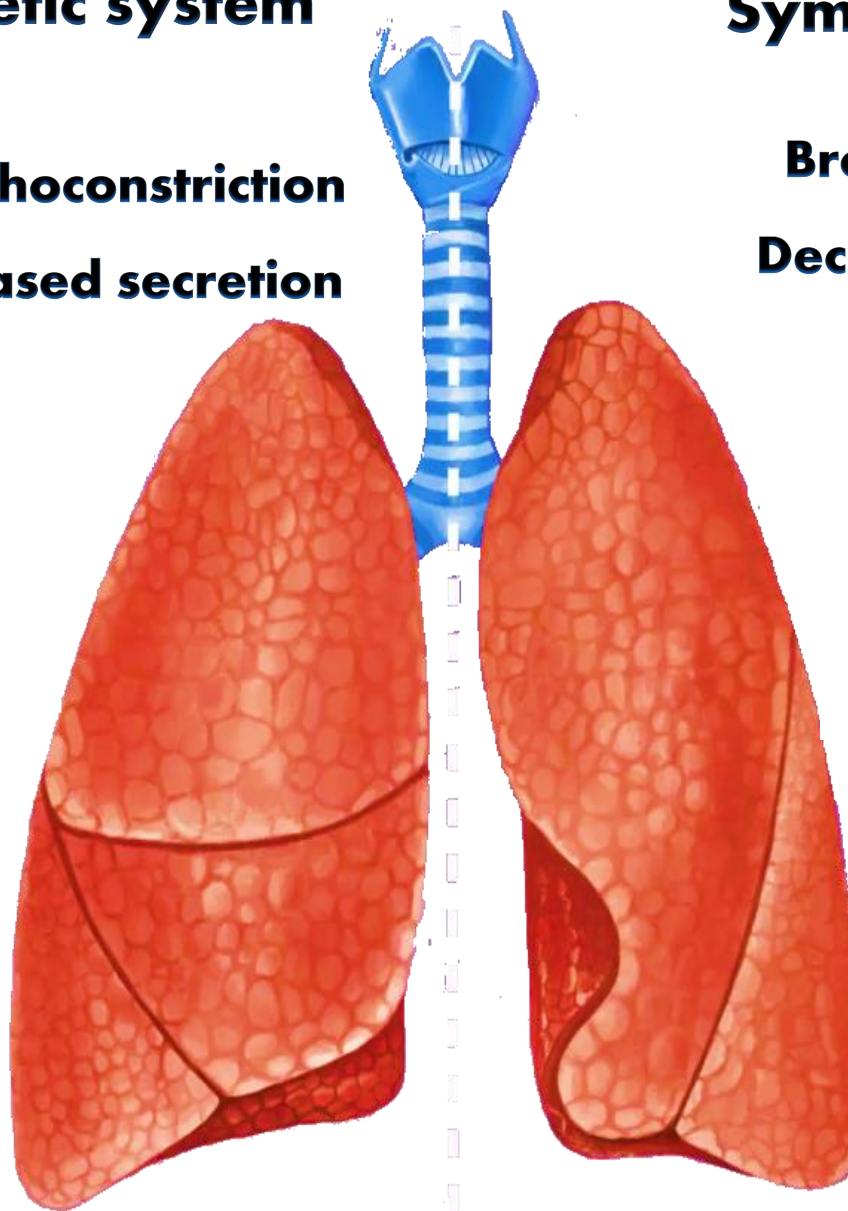
Respiratory Tract Disorders

Parasympathetic system



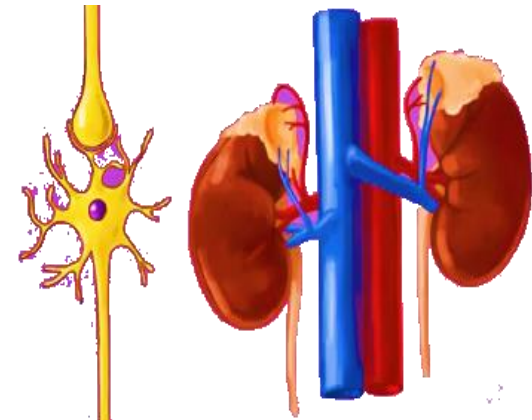
Bronchoconstriction
Increased secretion

Acetylcholine



Sympathetic system

Bronchodilatation
Decreased secretion



Norepinephrine

- alpha-1
- alpha-2
- beta-1

Epinephrine

- alpha-1
- alpha-2
- beta-1
- beta-2



Allergic Rhinitis { Hay fever }

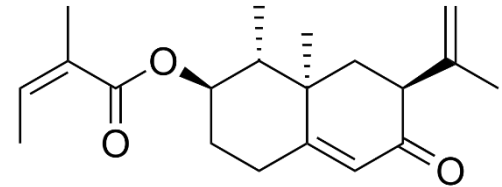
❑ Nose lining Inflammation

{ Dust - fibers - pollens }



❑ Treatment

1- Butter bur herb



Sesquiterpenes Petasins { Antihistaminic }

{ Root liver toxic contains pyrrolizidine alkaloid }

2- Peppermint oil decongestant inhaled

3- Eucalyptus oil decongestant inhaled



Common Cold

❑ Viral infection not reaching lung

❑ Herbal therapy

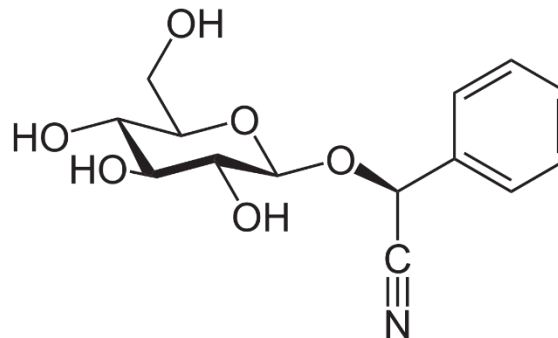
Iceland moss: Mucilage { Demulcent }



Elderberry: Flavonoids and cyanogenic glycoside { Antiviral }



Linden: Flavonoids and volatile oils { Diaphoretic }



Common Cold

Marshmallow: Mucilage and flavonoids

{ Demulscent and antimicrobial }



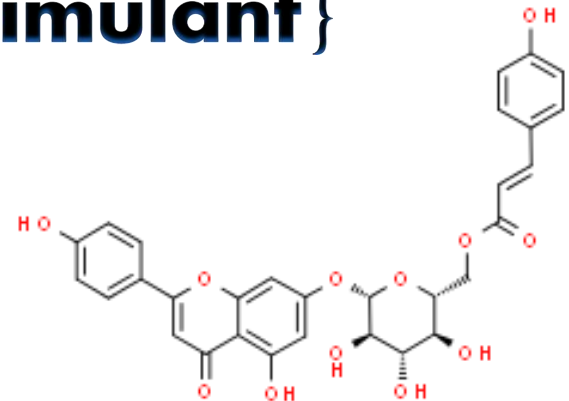
Tussilago: Mucilage, tannins { Demulcent and immunostimulant }



Cinnamon: Volatile oils { Diaphoretic }



Echinacea: Echinacin { Immunostimulant }

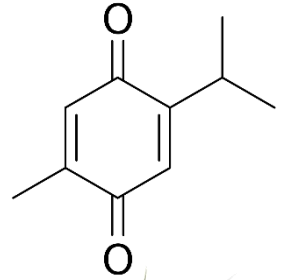


Common Cold

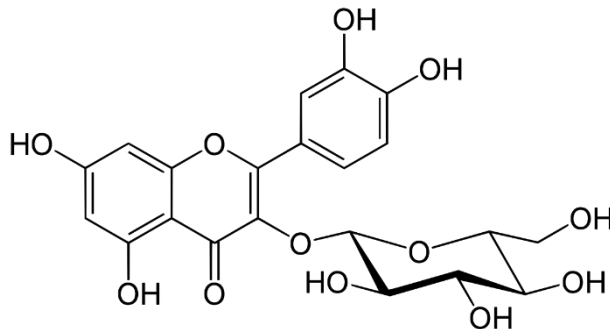
Astragalus: Flavonoids - Polysaccharides

{ Immunostimulant }

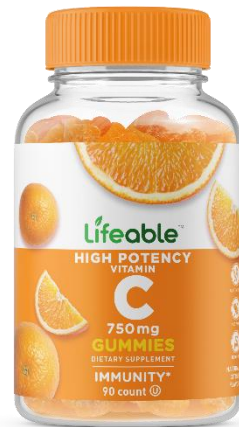
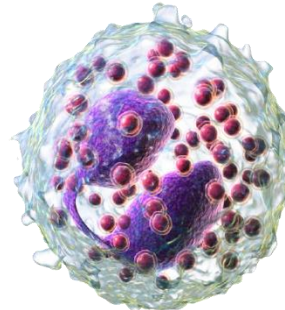
Nigella: Thymoquinone { Immunostimulant - Antiviral }



Citrus fruits: Vitamin C { Immunostimulant }



WBC



Influenza

☐ **Viral infection reaching lung (more severe)**

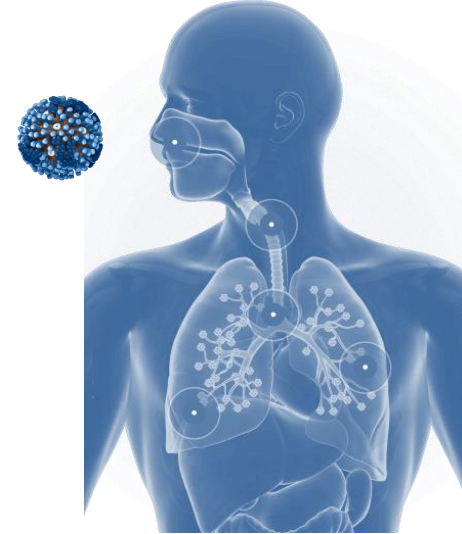
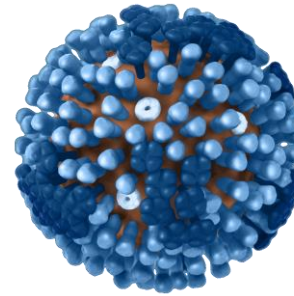
☐ **Treatment**

As Common cold

+

Mullein Verbascum: Contains mucilage

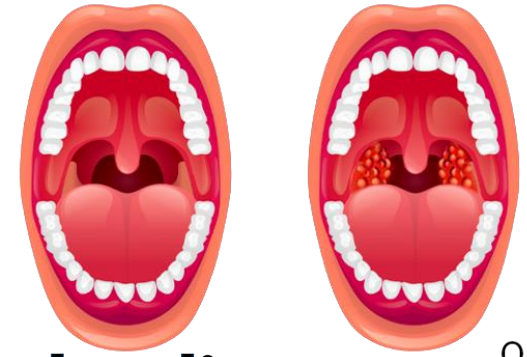
{ Demulscent }



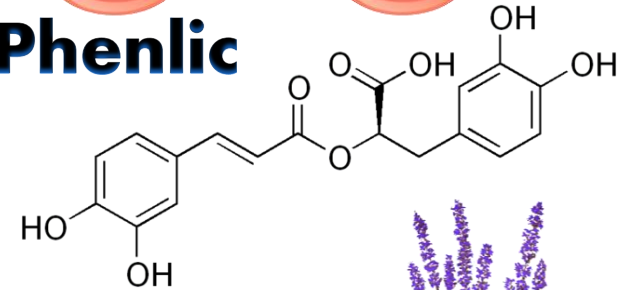
Tonsillitis

❑ Inflammation of tonsils

❑ Treatment



Sage { Gargle }: V.O - flavonoids - Phenolic compounds (Antimicrobial)



Liquorice lozenges: Triterpenoidal saponins –
Flavonids { Anti-inflammatory – Antimicrobial }

Marshmallow lozenges: Mucilage

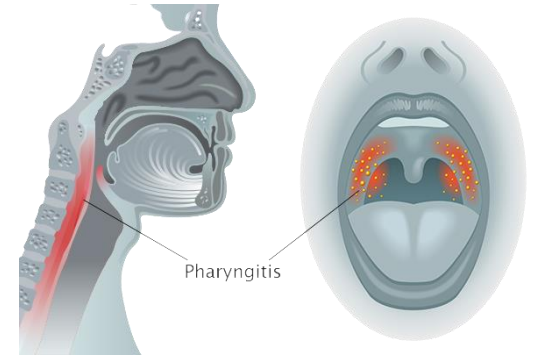
{ Demulcent }



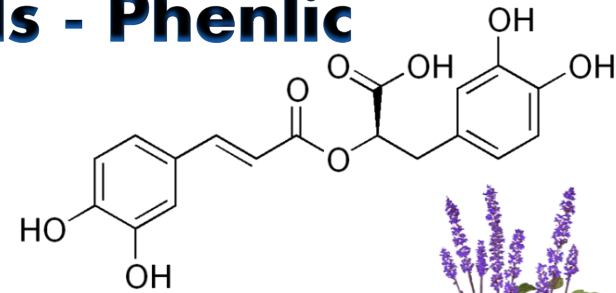
Pharyngitis

❑ Inflammation of the pharynx

❑ Treatment



Sage { Gargle }: V.O - Flavonoids - Phenolic compounds (Antimicrobial)



Liquorice lozenges: Triterpenoidal saponins =

Flavonids { Anti-inflammatory – Antimicrobial }

Marshmallow lozenges: Mucilage

{ Demulcent }



Sinusitis

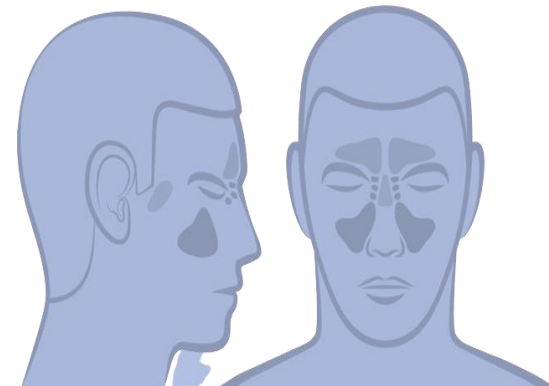
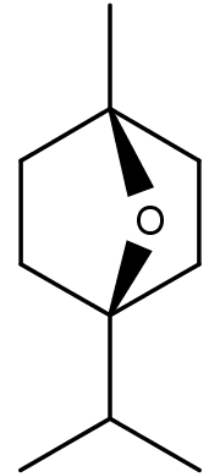
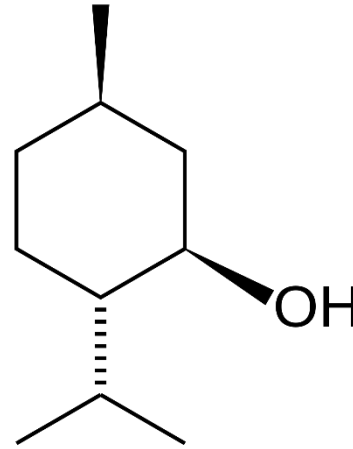
❑ Inflammation of sinus gland fluid intake,

Treatment

Decongestants

Menthol inhalation

Eucalyptus inhalation



Dry Cough

☐ Cough no phlegm or mucus produced

☐ Treatment

**Mucilages demulscents: { linden, marshmallow -
tussilago }**

Volatile oils: { Thyme - Anise - Guava leaves }

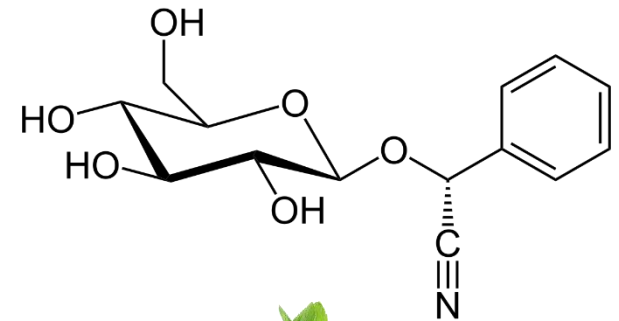
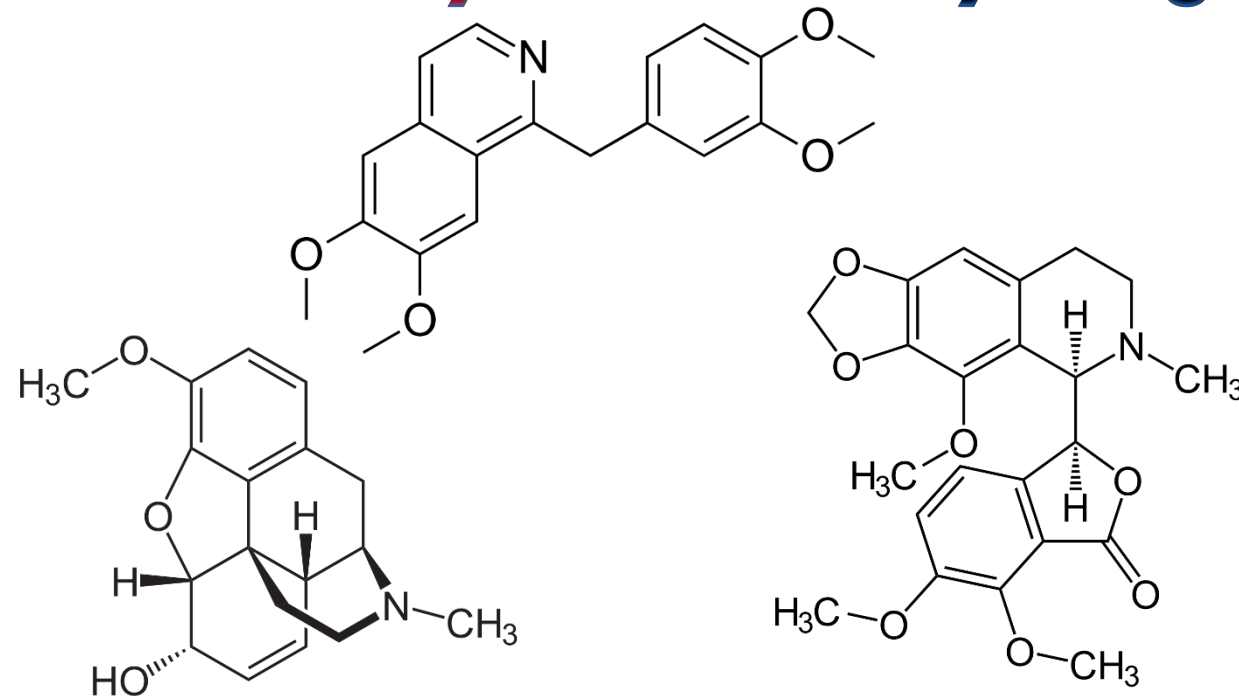


Dry Cough

❑ **Antitussive: Decrease sensitivity of peripheral and central cough receptors**

Opiates: Codeine

Wild cherry: Prunasin cyanogenic glycoside}



Productive Cough

❑ Cough produces mucus (phlegm).

Treatment



Expectorants: Irritate GIT Reflex expectorant

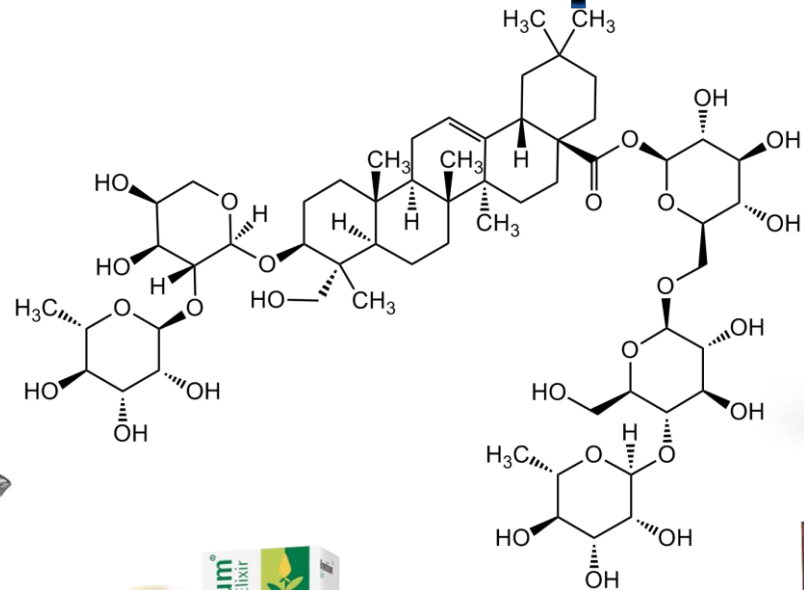
Hedera helix

Liquorice

Ipeca

Senga

Primula



Bronchial Asthma

❑ Airways of the lungs swell, narrow, wheezing, shortness of breath, chest tightness, and coughing

❑ Treatment

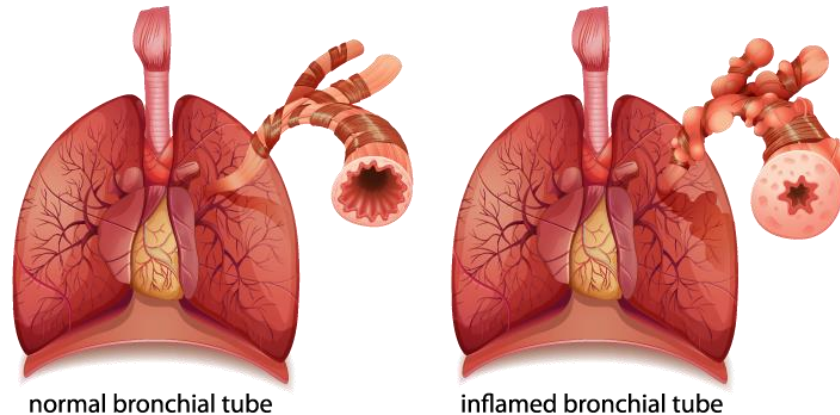
Bronchodilators:

Lobelia: Lobeline { Nicotinic receptor antagonist }

Ephedra: Ephedrine Stimulate B₂ receptors increases ciliary activity and liquefies mucous.

{ Palpitation and Hypertension }

Asthma - Inflamed Bronchial Tube



Bronchial Asthma

❑ **Expectorants: Reflex expectorants**

Ivy leaves { *Hedera helix* }

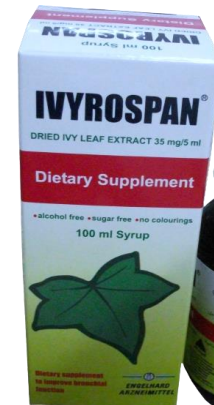
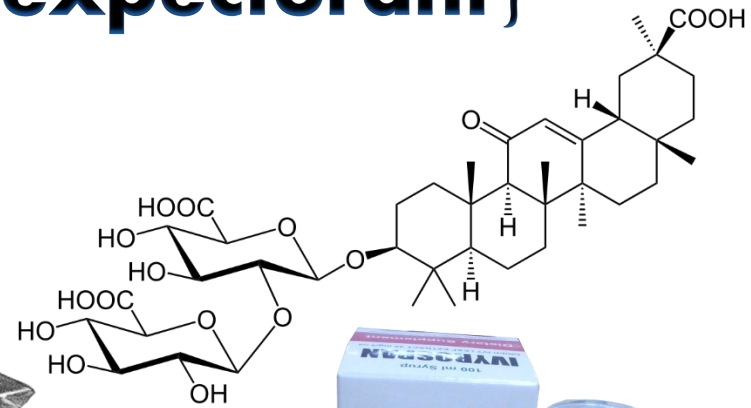
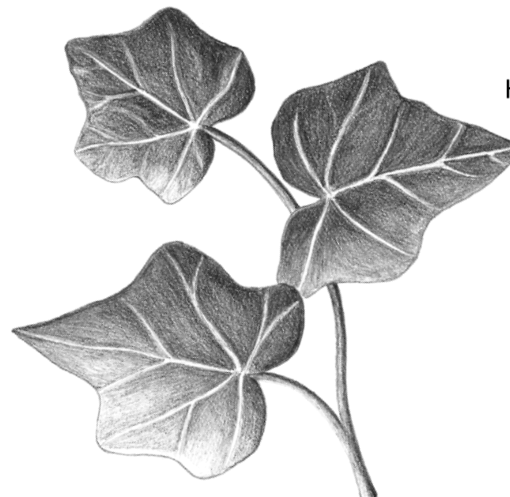
Senega (snake root) triterpenoid saponin

Senegin irritate GIT [Reflex expectorant]

Squill buffadienolides

Ipeca saponin

Liquorice

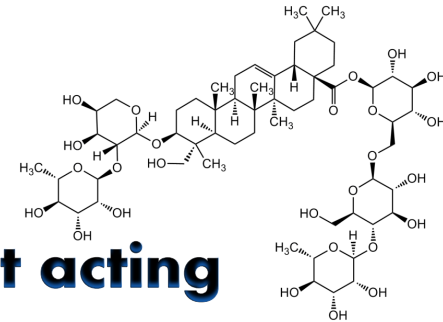


Bronchial Asthma

Ivy Hydra helix saponins

Primula triterpenoid saponins + volatile oils

{ expectorant }



Balsam Tolu: Benzyl Cinnamate direct acting
expectorant

Eucalyptus oil: Cineole

Thyme oil: Thymol

Anise oil: Anisole



Acute Bronchitis

☐ **Bronchial tubes lining inflammation**

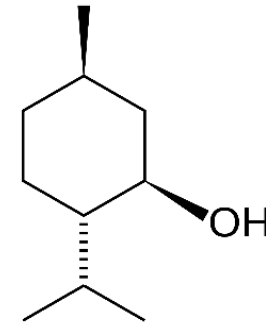
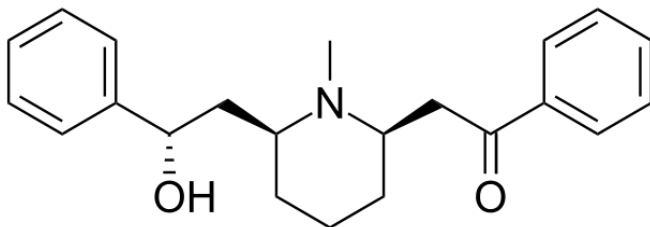
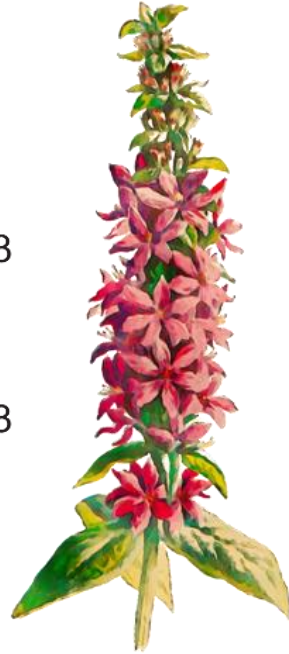
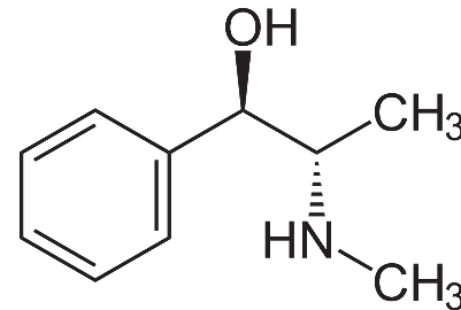
Upper respiratory

☐ **Treatment**

Ephedra: Bronchodilator

Lobelia: Expectorant - Bronchodilator

Menthol: Bronchodilator - Antimicrobial



Chronic Bronchitis

❑ **Bronchial tubes lining inflammation**
lower respiratory tract

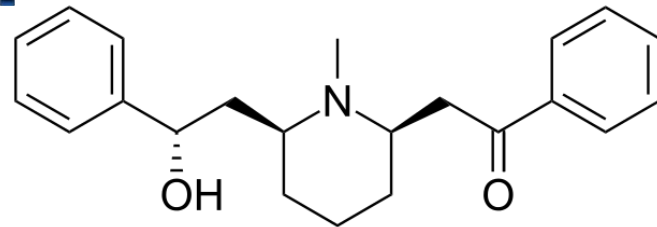
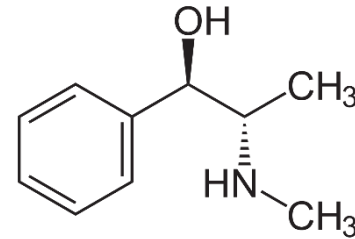
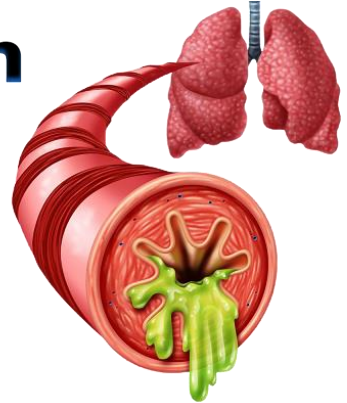
❑ **Treatment**

Ephedra: Bronchodilator

Lobelia: Expectorant

Menthol: Bronchodilator – Antimicrobial

Echinacea: Immunostimulant



Practical Exam { 10 Marks }

Case



- ☐ **Symptoms**
- ☐ **Disease Name**
- ☐ **Phytotherapy { 3-4 Herbs }**
- ☐ **Mechanism of action**
- Interaction if any**
- ☐ **Each group 5 students**



Thank You



THANK

YOU

